

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 11168074
PUBLICATION DATE : 22-06-99

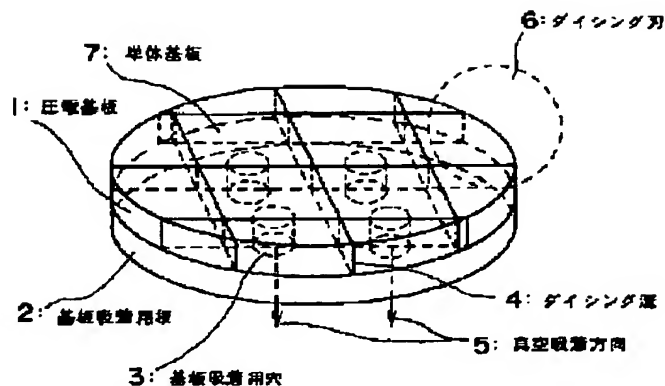
APPLICATION DATE : 03-12-97
APPLICATION NUMBER : 09332854

APPLICANT : HITACHI DENSHI LTD;

INVENTOR : KOBAYASHI KAZUYASU;

INT.CL. : H01L 21/301 H01L 41/22

TITLE : DICING METHOD OF PIEZOELECTRIC
MATERIAL SUBSTRATE



ABSTRACT : PROBLEM TO BE SOLVED: To perform a full dicing operation by fixing a piezoelectric substrate with a method, wherein the bottom face of the single unit substrate to be diced is vacuum-sucked for each single unit substrate individually.

SOLUTION: A plate 2 to be used for sucking of a substrate is provided with a plurality of substrate sucking holes 3, with which each single unit substrate 7 can be vacuum sucked individually. At this point, when a piezoelectric material substrate 1 is diced by a dicing blade 6 through vacuum-sucking of each single unit substrate 7 in the direction of vacuum suction, the single unit substrates 7 which are not dispersed because they are vacuum-sucked by the substrate sucking holes 3 and the substrates 7 can be fully diced. The piezoelectric material substrate 1 can be divided into single unit substrate 7 completely by full dicing, and working efficiency can be improved. Also, a plurality of substrate sucking plates 2 are prepared, and by having the interval of the substrate sucking holes conform with the single unit substrates 7, any size of single unit substrates can be fully diced by simply replacing the substrate sucking plate 2.

COPYRIGHT: (C)1999,JPO